

### **Remarks**

Claims 1-26 were pending in this application. In an Office Action dated November 2, 2004, the Examiner rejected claims 1-5, 24 and 25 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,633,924 to Kaish *et al.* (Kaish) in view of U.S. Patent No. 6,289,094 to Miloslavsky (Miloslavsky) or U.S. Patent No. 5,530,744 to Charalambous *et al.* (Charalambous). The Examiner rejected claims 6-8 under 35 U.S.C. § 103(a) as being unpatentable over Kaish in view of Miloslavsky or Charalambous in further view of U.S. Patent No. 6,011,838 to Cox (Cox) or U.S. Patent No. 5,864,616 to Hartmeier (Hartmeier). Claims 9-11, 16, 17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Miloslavsky in view of Kaish. Claims 12-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Miloslavsky in view of Kaish and Hartmeier. Claims 12-15 and 20-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Miloslavsky in view of Kaish and Cox. The Examiner objected to claims 18 and 26 as depending upon a rejected base claim but otherwise containing allowable subject matter.

Claims 1-8 and 18 have been canceled and claims 9, 16 and 24 have been amended. Applicants believe the remaining claims, as amended, are allowable and respectfully request reconsideration in light of the following remarks.

Independent claim 9, as amended, provides a system for reporting utilization of subscriber line call queues. The system includes a plurality of intelligent peripherals within an Advanced Intelligent Network, at least one service control point and a data server. Each intelligent peripheral implements at least one call queue associated with one of a plurality of subscriber. Each intelligent peripheral is in communication with a service control point generating and collecting information about each queued call. The data server aggregates queue utilization data for each subscriber.

The Examiner rejected claim 9 as an obvious combination of Miloslavsky in view of Kaish. The Examiner appears to rely on Miloslavsky to teach each element of Applicants' claim 9. However, the entire justification for the Examiner's rejection is "see fig.2B, column 12, col. 11 lines 56-63, col. 9 line 64-col. 10." The Examiner does not indicate which elements disclosed in Miloslavsky correspond to Applicants' intelligent

peripherals, service control point or data server. Thus, the Examiner has failed to establish a *prima facie* case of obviousness.

Applicants' invention uses call queues implemented in intelligent peripherals within an AIN network. Miloslavsky, on the other hand, discloses that any call queuing is done at call centers and not in the AIN network.

Miloslavsky first describes the traditional system at col. 12, ll. 5-21, reproduced as follows:

In conventional systems known to the present inventors, routing at the network level, that is, in the network cloud 100 associated with switching equipment receiving incoming calls and routing these calls to call centers, is typically done with reference to statistical history of call center activity, and routing to call centers is **to queues at the call centers**. In this conventional method, activity at each call center in a network is tracked and provided to service control points, and incoming calls are routed to the calls centers based on the latest available history. As an example of such a history algorithm, if there are two call centers in the system, and the latest statistical history indicates that call center 1 has received twice as many calls as call center 2, calls will be preferentially routed to call center 2 at a ratio to balance the activity. In this conventional system calls are routed from the network level to queues at the call center level. Once a call is received in a queue at a call center, the caller waits until his call is answered in order.

Miloslavsky then discloses routing without the use of queues at col. 12, ll. 22-27, reproduced as follows:

Referring now to FIG. 1, in a unique embodiment of the present invention, termed by the inventors Agent Level Routing, actual transactions at the call center level, rather than historical summaries, are reported from call centers to service control points, and calls are routed to agents **rather than to queues or groups**.

Miloslavsky does include an embodiment for routing calls to groups of agents, rather than agents, but this method again uses queues within the call centers as discussed at col. 16, ln. 43-col. 16, ln. 67, reproduced as follows:

In the instant embodiment related to group-predictive routing, incoming **calls are routed to groups at call centers** (call center 121 for example). In routing calls to groups, the goal

is to route an incoming call to the group which has the lowest projected handling time for the call. The algorithm, for example, for handling time may be the present number of calls in the group queue times the historical average call length.

In this embodiment the projected handling time is extrapolated on past history and the last action which occurred, and is re-computed each time feedback from the group is received. The predictive nature is derived from the fact that each time a call is routed, an assumption is made that the new call is **added to the queue at the group to which it routed**, without waiting for the call center to return the information, which involves latency. For example, when a call is received at SCP 101 (FIG. 1), there is a finite time involved before a routing decision may be made. Once the call is routed, there is a delay (latency) before the **call is received at the call center and added to the group queue** (in this example). There is a further delay for T-Server 207 to be cognizant of the arrival of the call. Then there is a delay until the time that T-Server 207 at processor 207 sends updated group queue data to T-Server 207 at processor 208, which updates the historical data at stat-server 209.

Thus, Miloslavsky does not disclose queuing calls in intelligent peripherals. It should be noted that Miloslavsky mentions intelligent peripherals (see, col. 7, ll. 41-48; col. 14, ll. 8-12), but does not even suggest that they be used to queue calls. Moreover, there is no disclosure in Miloslavsky for service control points generating and collecting information about each queued call. The Examiner has also failed to find any teaching of a data server aggregating queue utilization data for each subscriber.

Claim 9 is therefore believed to be patentable over the cited art. Claims 10-15, which depend from claim 9, are also therefore patentable.

Claim 16 has been amended to include the limitations of claim 18, which the Examiner indicated as allowable. Claims 17 and 19-23, which depend from claim 16, are therefore also allowable.

Claim 24 provides, *inter alia*, for generating a first electrical signal for receipt by the SCP in response to the detected TAT, generating a second electrical signal at the SCP for receipt by the intelligent peripheral requesting status of a queue associated with the subscriber line, generating a third electrical signal at the SCP for receipt by the subscriber switch instructing the subscriber switch to forward the call to the intelligent peripheral to be

added to the queue in response to a determination that the queue is active, and determining queue utilization information at the SCP about each queued call. None of these limitations have been identified by the Examiner as disclosed in the cited art.

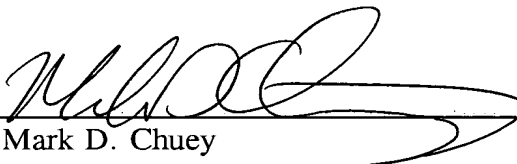
The Examiner has failed to establish a *prima facie* case of obviousness with regard to claim 24. Claims 25 and 26 depend from claim 24 and are therefore also patentable.

Claims 9-17 and 19-26 are pending in this application. Applicants believe that these claims meet all substantive requirements for patentability and respectfully request that the Examiner pass this case to issuance. No fee is believed due by filing this amendment. However, any fee due may be withdrawn from Deposit Account No. 21-0456 as specified in the Application Transmittal.

The Examiner is invited to contact the undersigned to discuss any aspect of this case.

Respectfully submitted,

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